DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-002411 Address: 333 Burma Road **Date Inspected:** 05-May-2008

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1700 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: N/A **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A Yes N/A **Electrode to specification:** No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component:** Tower Mock-up

Summary of Items Observed:

The Quality Assurance (QA) Inspector Gregory Bertlesman arrived on site at the Zhenhua Port Machinery Company facility on Changxing island, China to periodically monitor welding and Quality Control functions. While on site the Quality Assurance Inspector observed and/or discovered the following.

77 Meter Mock-up Macro Etch Samples

The Quality Assurance Inspector performed an additional review of macro etch samples for the 77M Tower Mock-up. The Quality Assurance Inspector recorded several measurements which included theoretical throat, actual throat, weld size, and reinforcement size. Of the forty-two weld specimens evaluated by the Quality Assurance Inspector, it was determined that two contained weld root cracks, seven were undersized, two contained unacceptable inclusions, five contained lack-of-fusion, and one, 8C2, appeared to have been labeled incorrectly. ZPMC also identified one specimen, 1F3C, as having lack-of-fusion, which the Quality Assurance Inspector had not identified as such. This Information was recorded and forwarded to Assistant Structures Material Representative Robert Reynolds for review. Below are several photographs illustrating the discrepancies.

WELDING INSPECTION REPORT

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Summary of Conversations:

As stated in the contents of the above report.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mazen Wahbeh (909) 987-4661, who represents the Office of Structural Materials for your project.

Inspected By:	Bertlesman, Greg	Quality Assurance Inspector
Reviewed By:	Cuellar,Robert	QA Reviewer